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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Xianping Ge

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EXAMINER

LIE, ANGELA M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/748,656	Applicant(s) GE ET AL.	
	Examiner ANGELA M. LIE	Art Unit 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-14,18-24 and 26-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-11,14,18-24 and 26-31 is/are rejected.
- 7) ☒ Claim(s) 12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 19-21, 27 and 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In particular, the rejected claims are directed toward a system and server device, however both of those systems do not recite hardware elements, thus the claims could be implemented in software per se, hence the claims are held non-statutory.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 3, 7, 14, 17-24 and 26-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Shultz et al (US Publication No. 2003/0061211), hereafter referred to as Shultz.

As to claims 1, 19, 20, 22 and 27, Shultz discloses a method comprising: receiving a search query (Figure 2, element 202); determining a geographic location associated with the query (paragraph [0012]); determining a topic associated with the query (paragraph [0052], i.e. identifying subject matter (topic); determining a location sensitivity score that corresponds to a geographical range associated with the topic (paragraph [0053], wherein results are identified in association with location information and business information (topic)); determining topical scores for a set of documents based, at least in part, on the query ([paragraph [0060], wherein the results can be sorted based on the distance between a user and destination); determining a distance score for each document in the set of documents based, at least in part, on the location sensitivity score and a distance between a geographic location associated with the document and the geographic location associated with query (paragraph [0060], i.e. “sorting criterion might include, a distance from a user identified location (e.g., step 232), corresponding advertising information (e.g., step 234) and/or business information (e.g., step 236)”; and ordering the set of documents as a function of both the topical scores of the set of documents and the distance scores of the set of documents (paragraphs [0060] and [0061]).

As to claims 3 and 7, Shultz discloses the method wherein the function depends on the topical score and the distance score of each document in the set of documents (paragraph [0060]).

As to claims 14, 21 and 26, Shultz discloses the method wherein the ordering the set of documents includes: generating an overall score for each of the documents in the set of documents as a combination of the topical score and the distance score, and ordering the set of documents based, at least in part, on the overall scores (paragraph [0060], i.e. "sorting criterion might include, a distance from a user identified location (e.g., step 232), corresponding advertising information (e.g., step 234) and/or business information (e.g., step 236)"); and ordering the set of documents as a function of both the topical scores of the set of documents and the distance scores of the set of documents (paragraphs [0060] and [0061]).

As to claims 17 and 18, Shultz discloses the method wherein the documents are web pages or advertisements (paragraph [0020]).

As to claims 23, 24 and 30, Shultz discloses wherein the location sensitivity data is determined based, at least in part, on a user profile associated with a user (paragraph [0058], wherein user behavior with regard to prior search result is represented by an action of a user, when he/she decides to change his/her listing criteria (in the user's profile) after receiving search results).

As to claims 28 and 31, Shultz discloses the method for presenting advertisements relevant to a target document (paragraph [0061]), comprising: analyzing the target document to identify a topic for the target document and a location

associated with the target document (paragraph [0053] wherein business information corresponds to a topic); identifying targeting information for a plurality of advertisements (paragraph [0053], i.e. advertising information); comparing the targeting information to the topic to identify a set of potential advertisements (paragraph [0053], i.e. the step of identification); determining a distance score for at least one advertisement in the set of potential advertisements using an advertiser location associated with the one advertisement and the location associated with the target document (paragraph [0060], i.e. determining distance); ordering the set of potential advertisements based, at least in part, on the distance score of the at least one advertisement (paragraph [0060]); and presenting at least some of the ordered set of potential advertisements (paragraph [0061]).

As to claim 29, Shultz discloses the method further comprising: ranking the set of potential advertisements based, at least in part, on the comparing; and wherein the ordering the set of potential advertisements includes re-ranking at least some of the set of potential advertisements (paragraphs [0060] and [0061], wherein a user can set criteria for sorting results at least in part based on advertisement, and after new adds are present, the sorting could be repeated, and order of the documents could be changed based on the updated advertisements).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 4-6, 8, 9, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shultz in view of Berkan et al (US Publication No. 2003/0074353), hereafter referred to as Berkan.**

As to claims 4, 8, 9, 10 and 11, Shultz teaches all the limitations disclosed in claim 1, however he does not explicitly teaches the method wherein the topical score is higher for a more relevant one of the documents than a less relevant one of the documents, and the distance score is higher for one of the documents with the geographic location nearer to the geographic location associated with the query than another one of the documents with the geographic location further from the geographic location associated with the query. Berkan teaches answer retrieval technique wherein the results are ranked based on the score i.e. the most top result having the highest scores (paragraphs 42 and 150). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to rank results in the descending order, wherein the top position would have the highest score, as taught by Berkan, because majority of match calculating algorithms lead to positive result, wherein each matching criteria increases the overall matching score. Therefore, if the document matches the query very well, the score would be also high. Once the score is

determined, the resulting documents can be put in order depending on their matching scores, therefore it would create additional complexity to reverse the matching scores so as to place the documents in the ascending order. Such an action based on the additional calculations requirement would slow down the processing time.

As to claims 5 and 6, Shultz teaches the method wherein determining distance score for the document includes calculating a distance from the document location to the location associated with the query (paragraph 81, lines 17-20). Shultz does not explicitly teach however, that the function used for the calculation of the score is monotonic. Berkan teaches the answer retrieval technique wherein score calculating function shows the monotonic behavior (Figs 8A-8D). It would have been obvious to one of the ordinary skill in the art during the time the invention was made to use a monotonic function as taught by Berkan, in Shultz's sorting algorithm because this would simplify calculations (constant polarity) and therefore minimize the processing time.

Allowable Subject Matter

8. **Claims 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

As to claim 12, the prior art does not teach the method as disclosed in claim 1, wherein a first document in the set of document includes a corresponding first topical score and first distance score, a second document in the set of documents includes a corresponding second topical score higher than the first topical score and second

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distance score lower than the first distance score, a third document in the set of documents includes corresponding third topical score higher than the first topical score and third distance score lower than the first distance score; and wherein the ordering the set of documents includes ordering the second document higher than the first document and the third document lower than the first document.

As to claim 13, the prior art does not teach the method as disclosed in claim 1, wherein a first document in the set of document includes a corresponding first topical score and first distance score, a second document in the set of documents includes a corresponding second topical score lower than the first topical score and second distance score higher than the first distance score, a third document in the set of documents includes corresponding third topical score lower than the first topical score and third distance score higher than the first distance score; and wherein the ordering the set of documents includes ordering the second document higher than the first document and the third document lower than the first document.

Response to Arguments

9. Applicant's arguments with respect to claim 1, 3-14, 17-24 and 26-31 have been considered but are moot in view of the new grounds of rejection.

Inquiry

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGELA M. LIE whose telephone number is (571)272-8445. The examiner can normally be reached on M-F.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Angela M Lie/
Examiner, Art Unit 2163

/don wong/

Supervisory Patent Examiner, Art Unit 2163